REMARKS

Claims 1-24 are pending in the application.

37 CFR § 1.105 Request for Information

The Office Action requests a copy of Home Phoneline Networking Alliance (HomePNA) Specification versions 1.0, 2.0 and 3.0. The Office Action indicated that fee and certification requirements of 37 CFR § 1.97 are waived for those documents submitted in reply to this requirement.

The Applicants are attaching hereto a copy of Home Phoneline Networking Alliance (HomePNA) Specification versions 1.0, 2.0 and 3.0 as requested in the Office Action.

35 USC 112 First Paragraph Rejection of Claims 1-24

The Office Action rejected claims 1-24 as allegedly failing to comply with the enablement requirement of 35 USC 112, first paragraph. In particular, the Office Action alleges that the specification allegedly fails to disclose 1) how a calibration value is determined and 2) how such a value is used to optimize the transfer of data between two nodes (See Office Action, page 3). The Applicants respectfully disagree.

35 USC 112, first paragraph reads:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The Applicants' specification describes at page 4, line 10-page 5, line 10 how a calibration value is determined. A calibration value is determined from a noise measurement value, propagation delay value, bit rate error value, and a station ID value. Applicants utilize a processor to analyze the noise measurement value, propagation delay value, and bit rate error value to determine a calibration value associated with a particular network ID. A person skilled in the art of networking interference would be able to take the Applicants'

disclosure and be able to formulate a calibration value. Such a calibration value can be created from the disclosed network properties in a near infinite number of possible combinations, dependent on the particular properties of the network being optimized, e.g., distance, low noise, high bit rate, etc..

Moreover, Applicants' specification describes at page 5, line 11-page 6, line 24 how a calibration value is used to optimize the transfer of data between two nodes. An iterative process of using a new test signal to a particular ID with changed characteristics determines if a better calibration value is possible. This iterative process is performed for all of the IDs on a network. In this manner, all the home network transceivers within the home network are calibrated, each having the ability to communicate with one another with optimized individualized calibration values for their respective transceivers, thus optimizing communication for any particular environment a home network transceiver is used in.

Applicants cannot foresee every possible source and combination of corrections for every network configuration imaginable and every possible sources of error associated with wiring within a home network. Thus, a person of skill in the art would take the Applicants disclosure and apply the teachings to a particular network problems being solved to optimize whatever characteristics are most important to a particular application.

Applicants' specification discloses 1) how a calibration value is determined and 2) how such a value is used to optimize the transfer of data between two nodes in full conformance with the enablement requirement of 35 USC 112, first paragraph. The Applicants respectfully request the 35 USC 112, first paragraph rejection of claims 1-24 be withdrawn.

35 USC 112 Second Paragraph Rejection of Claims 4, 6, 12, 14, 20 and 22

The Office Action rejected claims 4, 6, 12, 14, 20 and 22 as allegedly failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention under 35 USC 112. In particular, the Office Action alleges that the specification fails to specify any criteria for rendering a calibration value optimal. The Applicants respectfully disagree.

As discussed above, Applicants' specification describes at page 5, line 11-page 6, line 24 how a calibration value is used to optimize the transfer of data between two nodes. An iterative process of using a new test signal to a particular ID with changed characteristics determines if a better calibration value is possible. This iterative process is performed for all of the IDs on a network. In this manner, all the home network transceivers within the home network are calibrated, each having the ability to communicate with one another with optimized individualized calibration values for their respective transceivers, thus optimizing communication for any particular environment a home network transceiver is used in.

Thus, the criteria for rendering a calibration value optimal is that an iterative process either makes communication better or worse. If communications are made better, and a subsequent try makes communications worse, then the calibration value that made communication better is optimal (after a series of tries).

As discussed above, Applicants cannot foresee every possible source and combination of corrections for every network configuration imaginable and every possible sources of error associated with wiring within a home network. The specification describes a criteria for rendering a calibration value optimal in conformance with the requirement of 35 USC 112, second paragraph. The Applicants respectfully request the 35 USC 112, second paragraph rejection of claims 4, 6, 12, 14, 20 and 22 be withdrawn.

Claims 1, 3, 4, 6, 9, 11, 12, 14, 17, 19, 20 and 22 over Schober

In the Office Action, claims 1, 3, 4, 6, 9, 11, 12, 14, 17, 19, 20 and 22 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,493,320 to Schober et al. ("Schober"). The Applicants respectfully traverse the rejection.

Claims 1, 3, 4, 6, 9, 11, 12, 14, 17, 19, 20 and 22 recite a system and method of performing calibration between a first node and a second node based on a determined calibration value, the calibration value determined from at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value.

Schober appears to disclose a method and apparatus to automatically initialize and tune a link in a network system (See Abstract). Measurements taken to tune the link in the network are listed as resistance (See Schober, col. 7, lines 7-35), clock frequency variation between a master and a slave (See Schober, col. 8, lines 47-67), DC level measurement (See Schober, col. 9, lines 43-60), a phase measurement (See Schober, col. 11, lines 16-37), AC current output (See Schober col. 11, lines 55-67) and a skew measurement (See Schober, col. 12, lines 19-26). The method and apparatus compensates for noises, power supply variations, temperature changes or other environmental changes that may effect the timing and amplitude of signals that propagate across the links (See Schober, col. 5, lines 60-65).

Thus, although Schober discloses a method and apparatus that compensates for various noises and ailments associated with links in a network system, Schober's criteria for tuning are resistance, clock frequency variation, DC level, phase measurement and skew measurement. Schober fails to specifically measure noise, measure propagation delay and calculate a bit rate error, much less determine a calibration value from at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value, as recited by claims 1, 3, 4, 6, 9, 11, 12, 14, 17, 19, 20 and 22.

A benefit of determining a calibration value from at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value is, e.g., reduced propagation delays with minimal bit error. Noise, propagation delay and bit error are very important factors in such high demand applications as real-time voice and video transmissions. The cited prior art fails to take into consideration noise, propagation delay and bit error that can have a noticeable impact on time critical applications.

Accordingly, for at least all the above reasons, claims 1, 3, 4, 6, 9, 11, 12, 14, 17, 19, 20 and 22 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claims 2, 5, 10, 13, 18 and 21 over Schober in view of KOSA

In the Office Action, claims 2, 5, 10, 13, 18 and 21 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Schover in view of Knowledge of one of Ordinary Skill in the Art ("KOSA") at the time of the invention. The Applicants respectfully traverse the rejection.

Claims 2, 5, 10, 13, 18 and 21 are dependent on claims 1, 9 and 17 respectively, and are allowable for at least the same reasons as claims 1, 9 and 17.

Claims 2, 5, 10, 13, 18 and 21 recite a system and method of performing calibration between a first node and a second node based on a determined calibration value, the calibration value determined from at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value.

The Office Action relies on KOSA to allege that it was well known in the art at the time of the invention to centrally store data in memory with a corresponding identification (See Office Action, page 6). Thus, even taking the Office Action allegation that it was well known in the art at the time of the invention to centrally store data in memory with a corresponding identification (which the Examiner has failed to provide support for), Schober in view of KOSA would still fail to disclose or suggest a system and method of performing

calibration between a first node and a second node based on a determined calibration value, the calibration value determined from at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value, as recited by claims 2, 5, 10, 13, 18 and 21.

Accordingly, for at least all the above reasons, claims 2, 5, 10, 13, 18 and 21 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claims 7, 8, 15, 16, 23 and 24 over Schober in view of Stewart

In the Office Action, claims 7, 8, 15, 16, 23 and 24 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Schober in view of U.S. Patent No. 5,563,915 to Stewart ("Stewart"). The Applicants respectfully traverse the rejection.

Claims 7, 8, 15, 16, 23 and 24 recite a system and method of performing calibration between a first node and a second node based on a determined calibration value, the calibration value determined from at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value.

The Office Action relies on Stewart, allegedly in related art, to allegedly disclose issuing a network lock command on a network, ceasing nodes other than a first node or a second node for communicating on a network and a unlock command on the network, giving permission to all nodes on the network to again begin communication (See Office Action, page 7).

Stewart is directed toward a system and method of deinterleaving functions associated with memory controllers for a television receiving system (See Abstract). Stewart has **NOTHING** to do with tuning communications between two devices within a data network, and as such is **NOT** related to Schober in any way, i.e., is **NOT** related art as alleged.

Thus, even if it were obvious to combine two completely unrelated systems (which it is not), the theoretical combination would still fails to disclose or suggest a system and method of performing calibration between a first node and

a second node based on a determined calibration value, the calibration value determined from at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value, as recited by claims 7, 8, 15, 16, 23 and 24.

Accordingly, for at least all the above reasons, claims 7, 8, 15, 16, 23 and 24 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

William H. Bollman
Reg. No.: 36,457
Tel. (202) 261-1020
Fax. (202) 887-0336

MANELLI DENISON & SELTER PLLC
2000 M Street, NW 7TH Floor
Washington, DC 20036-3307
TEL. (202) 261-1020
FAX. (202) 887-0336

WHB/df